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Spring 2016

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Wossilek, Jamie and Patterson, Rachel, "Understanding Cultural Health Beliefs and Practices in Ghana, Africa" (2016). *Honors Research Projects*. 276.

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Understanding Cultural Health Beliefs and Practices in Ghana, Africa

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Abstract

Purpose. The purpose of this study is to explore the experiences and perceptions of university students and faculty after going on a medical mission trip to Ghana, Africa related to the health and illness beliefs of the Ghanaian people.

Background. Many organizations plan and conduct health mission trips. Although, many organizations are focused on improving health in developing countries, some may not understand cultural values and the health problems in those countries. “Improving health” is a complicated problem in developing countries and is hard to understand how those in the countries recognize health and illness.

Methodology. A purposeful, convenience sample was recruited from students and faculty from a Midwestern university who have traveled on a medical mission trip to Ghana, Africa. Individual interviews were conducted, audio recorded, and demographic data was collected. Participants responded to questions about experiences of Ghanaian health practices and beliefs.

Findings. Five common themes were found: Role of spirituality in mental, physical, and community health; education; priority of health: Ghanaian view versus American view; living conditions; and wound care.

Conclusion. The information gathered in the study can help others understand the health beliefs of another culture, better prepare themselves as a participant on a medical mission trip and more effectively implement approaches of care.

Introduction

Although many organizations are focused on improving health in developing countries, some may not understand cultural values and the health problems in those countries and may not know where to start. “Improving health” is a complicated problem in developing countries and is hard to recognize without understanding how those in the countries understand health and illness. Many organizations plan and conduct health mission trips including Nurses for Africa, Project HOPE, and many religious groups. These groups travel to developing countries and donate supplies, but it is difficult to tell if they create a lasting impact on the people. The donation of supplies can only go so far, considering supplies cannot be reused. Also, some Ghanaians may not know how to use the supplies (Agyei-Baffou, 2013).

Few individuals traveling to developing countries on medical mission trips understand the cultural view of health and wellbeing (Agyei-Baffou, 2013). R. Patterson, co-investigator, also confirmed this statement during a field study. It is important to understand the cultural values and beliefs of a mission environment because cultures are distinctive and unique in different countries. For example, it may be considered common sense in the United States (U.S.) to wash your hands after using the bathroom, but in developing countries such as Ghana, Africa, that may not be a health custom. There is also the issue of having access to water to wash hands. Some health related practices in developing countries may be unknown to Americans, such as giving birth in a natural environment with only non-pharmaceutical therapies such as breathing patterns and incense and oils. Culture practices of people must be respected because missionaries are entering their domain.

The Republic of Ghana in West Africa is an especially popular site for health mission trips because most of the people speak English, yet it is a country in great need of medical care.

Ghana, about the size of the state of Oregon in the United States, is in the lower western hemisphere of Africa, with a border on the Atlantic Ocean (Ghana Tourism, 2008). The population is around 25.5 million people (2012), with the growth rate at 2.2%. Although the gross domestic product (GDP) growth has decreased since 2011, the oil and cocoa revenues have recently been rising and the GDP is estimated and expected to begin going back up again. Ghana is considered a low to middle class country and is struggling to improve economically due to slow progression of advancing education, AIDS prevention, equal rights for women, and poverty due to lack of jobs available (Unicef, 2013). The two major cities in Ghana, Accra (the capital) and Kumasi, have hospitals, but in most of the surrounding rural cities there is nothing similar to a Western hospital. Rural hospitals have very limited staff and resources and several severe illnesses in the ending stages of life (Dislane, 2014). The hospitals in the cities, Korle Bu Teaching Hospital, in Accra, being the largest, can be compared to Western hospitals, although there are still many differences. Hospitals in Ghana are not sanitary and do not isolate patients according to infectious diseases (Matthews & Briggs, 2011).

Lack of finances and human resources make health care less manageable along with high numbers of epidemic breakouts. In rural Ghana there are significantly less healthcare workers than in cities. A large portion, over 10% of the population, live in the capital. In Ghana, there is a high incidence of both communicable diseases, such as the spread of HIV/AIDS and chronic diseases, such as diabetes. In 2013, in Ghana, 440,000 people were diagnosed with diabetes; 8,500 of them dying from complications related to the disease (International Diabetes Federation, 2014). Other main health concerns in Ghana are malaria, hypertension, heart attacks, strokes, and untreated wounds. Cardiovascular disease (CVD) leads with the highest number of deaths. In a longitudinal study of over 5 years and on 20,000 autopsies, Sanuade (2013) found that 22.5% of

people died from CVD. Most of the health concerns are accompanied by lack of knowledge and technology, allowing for communal diseases to be diagnosed and uncommon diseases to go undiagnosed (Matthews & Briggs, 2011). Despite many studies about health and Ghana, researchers in the past have described Ghanaians from a western standpoint and there are few studies about how Ghanaians view their health practices and their beliefs. The purpose of this study was to explore the experiences and perceptions of university students and faculty after going on a medical mission trip to Ghana, Africa related to the health and illness beliefs of the Ghanaian people.

Review of Literature

Ghanaian people experience health problems of both chronic conditions, such as diabetes, and highly communicable diseases, as HIV/AIDS. In 2012, 240,000 Ghanaians were living with HIV/AIDS with 28,000 of them being children born with it (Unicef, 2013). When considering chronic diseases, families of juveniles with diabetes deal with the lack of primary care facilities, education, and formal support, comorbid diseases, and low socioeconomic status. All of these factors play a role in the subjective view of health in people with diabetes across the world (Assari, 2014). In Ghana, the low socioeconomic status and high rate of comorbid diseases affect health, and cause a strain on everyday life experiences (Assari, 2014).

Social conditions in Ghana also affect the health of the people. For example, poor housing conditions, such as crowding and lack of ventilation, contribute to asthma (Udofla, 2014). Another barrier is the structure of hospitals in rural Ghana. There is a lack of space for patients with community hospital rooms accommodating 15-20 patients each. Crowded hospital rooms are a major problem because patients are not separated if they have a contagious disease or parasite. The lack of health promoting environments in hospitals and lack of clean amenities,

such as laundry and supplies, contribute to the spread of disease (Matthews & Briggs, 2011). Conditions in Ghana are different than those in a developed country.

There are many barriers to health promotion and care in Ghana. One of the biggest barriers is the lack of health workers, especially in rural areas (Udofia, E, 2012). Other barriers include lack of: educated healthcare providers and patient education, health care equipment, and financial resources (Kratzer, 2012). Related to lack of education, Donkor (2014) found that while Ghanaians knew that a stroke was a serious medical emergency, they did not know the warning signs, risk factors, or affected organ and had not been exposed to a stroke campaign, like most Americans. Another barrier to health promotion and care is that locals do not understand how to navigate the health care system (Agyei-Baffou, 2013). There have been many recent changes and misconceptions about what health care has to offer and what it does. Not only clients, but also health care providers believe many misconceptions about the capitation system including what is covered and not covered and the cost (Agyei-Baffou, 2013).

Researchers have examined medication non-adherence in Ghanaians and have found that Ghanaians do not follow medication regimens for hypertension with non-adherence at 93% of people prescribed to take medications. Researchers have examined reasons for such low adherence. Kretchy (2014) examined predictors of medication side effects and locus of control on adherence in Ghanaians to see if they predicted medication adherence. Locus of control is the extent to which individuals believe they can control events affecting them. Medication side effects were the strongest predictor of people not taking their medications with some even claiming to feel healthier when they did not take them. However, locus of control also predicted medication non-adherence. The researchers found that Ghanaians with a low locus of control had a high probability of medication adherence (Kretchy, 2014). Kretchy (2014) also examined the

effect of spirituality and religious beliefs on medication adherence in Ghanaian patients with hypertension. It was found that there is a negative relationship between spirituality and adherence, in that as spirituality increased, adherence decreased (Kretchy, 2014).

Theoretical Framework

The health state and views of the people of Ghana cannot easily be explained in one theory. There are many barriers to medical treatment including lack of finances, schooling and proper facilities and equipment (Kratzer, 2014). There are also many barriers on the researcher's end including, the continuously changing country, lack of studies previously done, and the amount of different spiritual and cultural beliefs that need to be compliant with in order to develop a valid theory. To understand the spiritual and cultural views and if they contribute to or are independent of the barriers identified, the study will use Leininger's Transcultural Nursing Theory. According to Leininger (2008, p.2),

This theory has been independently developed and soundly constructed as a highly relevant theory to discover the care and health needs of diverse cultures in hospitals, clinics, community settings, and study of many cultures worldwide... In depth knowledge of the specific culture care values, beliefs, and lifeways of human beings within life's experiences is held as important to unlock a wealth of new knowledge for nursing and health practices.

Because of lack of understanding of the health views of Ghanaians, an ethnographic method was used in this study. Ethnography is the study of describing culture through what one culture's people do, what they know and what they use (Schmidt and Brown, 2012). These techniques are used to create a comprehensive understanding of a complex problem such as

describing the health views of Ghanaians. This was done by using qualitative methods such as open-ended interviews to create a large amount of data. There was a focus on ethnonursing or studying the nursing care beliefs and practices instead of the broadness of describing the entire Ghanaian culture because of the time constraint of the Midwestern college students and faculty traveling to Ghana since they were only be there for one to two weeks.

Design

The study was a focused, practitioner ethnographic design. This design explores experiences and perceptions of university students and faculty who have gone on a medical mission trip to Ghana, Africa related to the health and illness beliefs of the Ghanaian people. Information about the participants experiences and perceptions of health and illnesses of the Ghanaian people were collected with individual interviews. The trip setting was a rural Ghanaian village where university students and faculty from the Midwestern United States were going for a medical mission trip. The students and faculty lived in the Ghanaian village for one to two weeks then returned to the United States.

Sample

Sampling was completed through purposeful, convenience sampling. Purposeful sampling is strategically using participants that will provide the most information. Convenience sampling techniques were used to recruit students and faculty from the Midwestern United States by asking participants from past medical mission trips to participate in the study. The inclusion criteria included: traveling to Ghana on a medical mission trip and being 18 years old or greater. Participants were not excluded based on gender or ethnicity. Recruitment and data collection started after University Institutional Review Board approval.

Sampling and Data Collection Procedures

Purposeful convenience sampling was used to recruit participants. All members of past medical mission trips were asked to participate in the study through an email describing the study. Those willing to participate were then asked to set up an interview time. At the interview, a consent form, including consent for the interview to be recorded, was included and completed. Interviews were conducted individually and held in a private office room setting. Following obtained informed consent, participants were asked to give demographic data about gender, age, ethnicity, education level, and student/faculty status.

Interviews were semi-structured and video recorded. Each interview lasted approximately 45 – 60 minutes. During that time participants were asked to respond to questions about experiences and observations of Ghanaian health practices and beliefs. Data was collected until all participants were interviewed. No identifying information was kept about participants. Consent forms were kept in a locked safe and interviews were recorded and transcribed verbatim. All files were stored on a password-protected computer and only the co-investigators and sponsor had access to the files.

Tools for Data Collection

Semi-structured interviews were conducted with all participants. The same open-ended questions about observations of Ghanaian health were asked to all participants, but the co-investigators were free to ask follow up questions to gain the maximum breadth and depth of data on the topic being studied. The semi-structured interview style allowed researchers to gain open-ended information but also stay on topic. Examples of interview questions follow.

1. How would you describe the difference between your definition of health and that of the local Ghanaians you observed?
2. What health beliefs did you observe the people of Ghana expressing?
3. What are some barriers to achieving a state of health in Ghana?
4. What health practices did you see the local Ghanaians using when they felt sick or had an injury? What circumstances would cause a Ghanaian to go to the hospital?
5. Did you feel prepared for what you observed in Ghana? What surprised you?
6. When you think about what I've asked you to talk about so far, what should I have asked you that I didn't?
7. How would you respond to that question?
8. When you think about what you have talked about in this interview, what would you tell a person who plans to go on a medical mission to Ghana? What would you tell a person who plans to go on a medical mission to any developing country?

Data Analysis

This project was granted UA IRB approval in January of 2015. Data was analyzed as it was collected. After interviews were video recorded they were transcribed verbatim and data was reviewed by co-investigators. Each co-investigator read and re-read transcripts and identified patterns. Reviewing transcribed data and recording the frequency of topics identified common themes. The co-investigators met frequently during data analysis to discuss results and continued the collaboration of the findings. Findings were discussed with the project sponsor, which may

be viewed as consultation further increasing credibility of findings. All demographic data was analyzed with descriptive statistics.

Findings

Four males and three females participated in this study. Of the participants, all were studying nursing or pre-nursing majors at a midwestern university. Of the participants interviewed, four went on the first trip and four went on the second trip, with one participant who went on both trips. The ages of the participants were two 19 year-olds, one 20 year-old, two 22 year-olds and two 23 year-olds. In reporting the data below, F indicates first trip, S indicates second trip, and B indicates the participant who went on both trips. The number is the identification number of the participant.

Themes were identified from the data primarily focusing on the cultural health beliefs and practices of Ghanaians observed by the participants. These themes were found in each interview so they were common experiences of all the participants. The common themes that were established include the following: the role of spirituality in mental, physical, and community health; education; priority of health: Ghanaian view versus American view; living conditions; and wound care.

Role of Spirituality in Mental, Physical and Community Health

Findings from this study found spirituality is directly related to health practices in Ghana. Health care choices are driven by spiritual beliefs. Six of the seven participants reiterated that spirituality played a role in the communities' health, whether partially or fully committed to their spiritual leader. Common spiritual practices include herbal remedies, praying, and visiting a

spiritual healer. An example of a common spiritual practice is keeping a newborn in the house with the family and not allowing visitors because it is believed that evil spirits can harm the baby. Spiritual beliefs prevent Ghanaians from utilizing life-saving medication because they believe spiritual leaders are superior to any medical doctor since spiritual leaders information comes from God. Participant F3 stated,

They would be fed one thing from a doctor and another thing from a spiritual leader, so they are saying this is an evil spirit in your body, like it's not going to be the drugs that cures you, you need to get right with God or whatever spirit in order to get that out of your body. So they would have the drugs but they wouldn't even take them because it was against what the religious leaders where basically telling them what to do."

This shows how much religion and spirituality influenced the Ghanaians health practices since spiritual leaders were trusted more than medical doctors or medicine.

Participants identified differences in treatment of mental illness in Ghana from their experiences in the United States. In the United States, mental illness is seen as a physiological imbalance of emotions and thoughts while in Ghanaian culture mental illness as seen as anyone who doesn't contribute to society or acts different from the norms. Those who could not work would be treated as outcasts and those who acted differently could be subject to punishment by the community. Participant F1 stated,

I don't know if they have any concept of mental disease... Well if congenital disorders are necessitate ostracizing a member of the community I wouldn't say it would go too far, depending on the mental illness that they would get ostracized too. There might be

elderly that had dementia or they would just get taken care of by their family or hidden away and wouldn't go out much.

In one village that was visited, the participants witnessed how a mentally ill person was treated. Participant S6 described this experience,

We saw a person who was very unstable and we didn't really realize what was going on. He came up to us and was trying to hug us and just very odd behavior and he followed us all the way back to where we were staying and we didn't really understand why was he following us. It was the first time over there we didn't know why he was following us and we told one of the people, just letting you know this guy followed us home, and they're like he's sick, and we're like what do you mean sick, oh like in the head he's sick. To make him leave they actually started whipping him to make him leave, it was awful really, this guy was taking off his clothes, he wouldn't leave and that's the way that they got him to leave is by what they call it 'caning' the people that we were staying with said he's mentally ill, they don't have like a, 'oh I'm going to take you to the hospital and get you treatment or whatever' like how we would do here; it's completely different.

All the participants who went on the second trip shared the same experience mentioned above in their interview. This experience really resonated with the participants about the lack of education about mental illness and how they are viewed as mentally ill because of evil spirits and cannot be helped. People who have physical deformities are not treated as harshly as the mentally ill. Participant F-2 described a man using a walking cane as an outcast who was only given the leftovers of his village's food supply since he was unable to contribute to the food supply. Spiritual practices in Ghana are seen as superior to medical intervention. Illnesses

including mental illness are often identified as a spiritual problem and not a health problem so they are not being treated with Western Medicine but instead by traditional or spiritual means.

Education in Relationship to Healthcare

Findings from the study found a lack of education is seen throughout the developing country of Ghana. Six of the seven participants mentioned lack of education during their interviews in regards to natives being under-educated in healthcare. Participants discussed that education in the school systems is minimal, education for higher teaching is scarce, and basic health education is not available. Starting young, children learn habits: habits that are formed from watching and mimicking elders. Education is lacking tremendously throughout the country and little is known about health care, according to the participants, as evidence by local citizens comments and actions. According to participant F3, “They really didn’t connect symptoms to conditions. I think a big part of that is just they don’t know.” For example, if a Ghanaian was dizzy or continued to have a headache, it would not be associated with having a brain tumor or other neurological problem. “I think there was more education in the children due to efforts by various groups. I mean you did see the adults being educated, but very occasionally,” confidently stated participant S1. Another participant, F5 stated, “...they are the new generation coming up, so if anyone is going to make a change it is going to be them.” F5’s statement confirms that children are the next generation and education is important to improving health in the future.

Ghanaian jobs include; farming, paving, recycling, electricians, etc.: jobs that are learned in a trade school or by repetition. “They don’t have the resources to an adequate nursing education and medical training. Also, materials in general there are very scarce, resources and everything that they have is reused,” participant F3 explained.

Teaching encased a majority of the participant's trips. Participant's advice to future trip goers included learning how to explain things in very simple terms. "In the hospital they didn't know CPR; we had to teach the doctors and nurses CPR," explained S6. When asked what the adults were taught, B4 stated, "...obviously CPR, how to check for hypertension, hand washing, nutrition, brushing your teeth, taking showers, how to not spread germs, infection, wearing gloves when handling wounds, and everything like that." Participants discussed how pertinent these teaching sessions were. Each respective chief was then to return to his village and inform his people of the healthy lifestyles he learned. It was important, that what was taught was also significant and comprehensible to the Ghanaians. This was demonstrated by having the chiefs come up and practice initiating CPR on a dummy. Each took turns until everyone had a chance to properly save the "patient". This was not the case when teaching in more rural areas. Teachings and educations were not reciprocated well, due to already being set in certain ways or lack of understanding. According to participant S6, "We tell them this, but do they really practice it? Does it really get through their head?" Multiple patients were seen with high blood pressures and high blood sugars. Participant S7 added,

We were trying to do a quick triage education for the people with super high blood pressure and the people with high blood glucose. We would tell them what to stay away from, such as starches and carbs, and people with hypertension to stay away from high salt foods and not to put extra salt on their foods. I don't think they have enough education based on which foods are good for which health concerns.

Participants stated it was frustrating at times trying to teach patient's in each community which foods to avoid and which foods are best because many would just nod their head, yet showed no signs of emotions. Participants continued to teach and try to relay the message to each patient,

regardless if they seemed interested. Some modifications can go a long way and show improvement.

Priority of health: Ghanaian view versus American view

One way to relate health practice views to one another are to compare and contrast; American view versus that of a native Ghanaian. Many participants stated American health views are much more progressive and scientifically advanced than that of a developing country. Participant F3 explains that American health is proactive while Ghanaian health is reactive. To be proactive is to participate in yearly check-ups, take care of our bodies by eating healthy and exercising, as well as taking vitamins. Participant F5, described her definition of health as, "...yearly checkups, always having Purell everywhere; that's what I picture, washing your hands, definitely." Daily habits of Americans include washings hands and brushing teeth. Ghanaians do not have these daily routines or habits as part of their everyday practices. Participant F2 relied back on memory for a definition of health in a previous nursing class as, "A general wellbeing, lack of disease and promotion of healthy habits in your own life." Promotion of healthy habits is key, showing that a priority to Americans is creating healthy habits and incorporating them into their daily routine. Another participant, S7, explains,

In Ghana, if they don't visually see something health wise, whether it be dirty or they have physical symptoms of being sick then they don't think that they're sick so a lot of times they don't know they have underlying health issues until something else becomes present.

Just because something isn't visible, a condition or disease could be presenting asymptotically. A priority is to stay alive and protect the family for many Ghanaians, there is no time in the day to stop and travel to a clinic if something is wrong. Participant S1 shares,

I think what they are prioritizing is staying alive essentially... they are focused more on the everyday things like going out to the fields working, getting around, bring up their children and not so much maintaining the utmost health just like its more focused on the daily activities.

If a day's worth of income has to be sacrificed for a doctor's visit, shame and guilt may hang over the family members head. According to participant F3,

Ghana has a very selfless culture. For example, we had a woman who had a really high blood sugar and we told her to go to the hospital. She couldn't go because she didn't have anyone to watch the kids and that she had work that needed to get done. That belief of putting other people before your own health needs, even in like the presence of an emergency they didn't really believe in health to be a big player in their life like how that went about with their customs and whatnot versus over here it's very egocentric.

According to participants, survival was the means of everyday life, and was the major priority. It may not have been that health was not important, but it was not the most important. Ghanaians decisions are present-based and decisions are made in the moment based on survival needs because this is what is significant, rather than a developed country's view where decisions are future based against future consequences.

Participants explained that their perceptions were that day-to-day life is different for those living in a developing country versus a developed country. Days are prioritized differently, and some events may be more pressing. Participants also commented that healthcare insurance is nonexistent for the most part in Ghana. If natives do have insurance they are considered upper class. Health insurance for one year is the equivalent to \$25 US dollars. Participant F3 explains, “There is a lack of willingness to pay for health care. I think that leads with the whole idea of not really putting their health first.” Participants continued to explain that a lack of accessibility plays a role in identifying whether a family member goes to the hospital. Because there are spiritual leaders that live in every community and village, they are visited more regularly because they are convenient.

Living conditions as barriers to health in Ghana

Findings from this study found that living conditions in Ghana play a large role in their health practices. The participants identified many conditions that were barriers to health including: finances or poverty by six out of the seven participants, lack of transportation by all seven participants, lack of clean water or general cleanliness by all seven participants and lack of medication or technology access by four out of the seven participants. Poverty is identified as contributing to all the barriers since transportation, cleanliness, medication access and infrastructure can be improved.

The participants described most of the Ghanaians they encountered as living in poverty and having to work every day in order to survive and provide for their family. Participant S7 described the Ghanaians as “I shouldn’t say everybody but a lot of people are very under the poverty limit.” The lack of financial resources available makes most health care unaffordable to

the Ghanaians. Participant F3 describes health insurance as, “Well as far as insurance goes it’s about 25 dollars, like U.S. dollars a year to have insurance... but over there it’s not really an obtainable thing.” This is drastically lower than the price of insurance in the U.S. but most Ghanaians are still unable to afford it. When living in poverty people have very limited money and have to decide the best ways to use it. Participant F2 describes this dilemma, “An ambulance ride was 20 cedi (Ghanaian currency) and that’s two weeks of food for a family to buy at the marketplace so are you going to put your family at risk or are you going to suck it up.” Although over a year’s time 20 cedi could be put towards health care it is hard for most Ghanaians to pay that much money at one time.

This participant also touched on the transportation barrier. All of the participants suggested transportation as a barrier and it ties very closely with poverty. Participant F3 stated that transportation and poverty are related,

It’s all on foot, if you need to get a boat it’s a fare you have to pay that and that’s just an additional expense. If you have to get a taxi they are so remote from where they need to get to.

Participant F2 describes the amount of cars, “In the community where we were at we barely saw any vehicles compared to the city. We would see them driving up and down but our host family was probably the only ones we saw who actually had a vehicle.” Most of the Ghanaians the participants encountered did not have a vehicle and did not have the means to pay for one so walking was the only option and participant F5 states, “If they had to get somewhere really quick that’s not usually an option.”

Poverty also relates to the cleanliness, lack of technology and poor infrastructure of the villages. When asked what was most surprising about the trip participant S1 stated,

I think probably just the living conditions themselves. I mean the village was small it was all dust essentially they had trees and farms but all dirt. There was a lack of technology where we were. I mean there was power most nights, there was running water but not purified to the level that it is here.

The participants traveled around different parts of Ghana and participant F2 describes the biggest city, “The capital was a bit more civilization with more buildings, but even then it wasn’t the best infrastructure, it had open sewage and stuff. And that alone not having clean water all the time can be an issue to health.”

They do have hospitals, but they are not up to the standards of cleanliness Americans expect. Participant F5 describes the rooms, “The hospital rooms were basically outside that obviously is not very clean.” Participant F3 adds, “I’ve never had wildlife in a hospital room with me before but there were a lot of chickens and goats walking around.” Inside the hospital there was a lack of sterile supplies or simple technology such as electric beds. Participant F3 stated,

They were using syringes that you see in 70’s movies it was terrifying and all these things are being reused ... So just seeing like the distinct differences, like they use a lot of the glass vials over there which we rarely ever use over here.

Participant B4 elaborates on the hospital technology, “Their IV poles were made out of wood. Their beds are obviously not electronic like regular beds almost and hard.” Due to

poverty, the lack of cleanliness and technology, hospitals in developing counties contribute to the spread of disease and ultimately the health of the people.

Finally, there is limited access to medications and medical supplies. Participant S7 explains how hard it is to get HIV medication in Ghana,

It is not as readily available as over here, for example medication to slow the HIV process is only available in one location in Ghana,... and people from all over Ghana come there to have access to this medication, ... It's not as readily as available number one because of price, and number two because of technology and stuff over there it's just not able to be made and it's too expensive to import.

There is even a barrier to getting general medical supplies. Participant S6 describes the local stores, "There is no store down there where you can say 'like oh hey we ran out of... gauze to wrap this wound', there is nothing like that." Accessing proper medical supplies such as medications and supplies provides a barrier to everyday health and contributes to the health status of the Ghanaians.

Wounds

Wounds or wound care was mentioned by all of the participants. Wound care came up in a variety of the interview questions asked and wound care was a big part of the volunteer work on the trip. The participants used expressions of surprise and hand motions when talking about the wounds and their severity. When asked what was the most surprising part of the trip participant S1 stated in regards to the wounds seen, "I didn't really know things got that bad." Similarly, when asked about advice for future trip goers participant B4 stated, "Mentally your

going see some pretty bad wounds so prepare yourself.” All of the participants interviewed made the point that wounds in Ghana are unlike anything seen in the United States.

The wounds in Ghana were different because they would go on for years without being addressed and sometimes never heal. Participant S6 describes when a Ghanaian got a wound,

They would call for help I guess if this wound is so severe but even so these people are still living with these wounds ... for like 10 years ... Some of the wounds, ‘like wow you really have been living with this and your still going on with your life’.

Participant F3 explains the barriers to wound healing, “These wounds never heal. So even when they do go to the hospital and seek care it’s almost like that important follow up care isn’t implemented.” To put it in perspective a simple accident can cause a Ghanaian to have a permanent disability. Participant F2 gave this example, “If a brick falls on you .. you deal with it. ..they don't fully recover from stuff like that.” Wounds are a major health issue in Ghana due to their severity and permanence.

Spiritual beliefs and practices were often adhered to for wound healing by the Ghanaians. Participant F2 gave the examples, “I do remember we had one women who was missing a toe and had a wound that remained and she had wrapped it in a leaf with fecal matter and that was just a traditional remedy,” and “One guy who had an edematous leg and a large wound who just thought it wasn’t getting better because of spirits and just though you wait for it to get better.” Not all of the Ghanaians participated in these spiritual practices for wound healing. Some Ghanaians tried to take care of their wounds using western medicine techniques but the lack of cleanliness and lack of medical supplies prevented true healing. Participant B4 states, “Obviously it’s pretty unsanitary over in Africa, dirt would get in it or anything really when they

take care of it.” Wound care was mostly done by one villager who went around the village and tried to do wound care to the best of his ability. Participant B4 describes his experiences on both trips with wound care.

(On the first trip) We went with this one person who was responsible in handling the wounds for the village and the wound care of the village so we would just go with him and watch how he did it and participate so he would do some and we would do some. So I don’t feel like we made as much of an impact as the second time. The second time we were on our own doing our best using our knowledge. We brought a lot more equipment than the first time. We were a lot more prepared than the first time... there would be like seven or eight patients we’d have to go see and we met up with someone that took us around and we would just kinda take care of those wounds and get to ... dress them, clean them, all that stuff. But they would come back and we would converse and... think of which patient needed what and I guess collaborate and... come up with a plan of how to treat each patient efficiently.

The summary of the data analysis showed that participants on the first trip did not know what to expect and just helped with the wound care that was already in place. However, the participants on the second trip were able to prepare, learn about wound dressings, and bring more supplies. This leads to the question of what happens after the participants left Ghana and the supplies ran out. Participant B4 describes how the participants educated the Ghanaians,

We would teach them to clean their wraps, their old wraps, and then we would bring a new one and put the new one on and then they would clean the old one and then when we came back they would take the clean one and put it on and take the old one off and then

clean it the old one and they could just keep switching so when we weren't there they could take care of it themselves hopefully.

Wounds were a common ailment the participants encountered in Ghana and the participants planned and educated them about sustainable treatment options.

Discussion

Limitations

In this study, there were some factors limiting the trustworthiness during data collection. First, participants selected for interviewing came from a small pool of eligible participants who had gone on a medical mission trip to Ghana, so there were only seven participants overall. All participants were recruited from one location, the same Midwestern University, which puts restrictions on data findings. Second, participants were interviewed individually allowing for variability of follow up questions. Third, all participants interviewed were colleagues of the peer researchers contributing to a more causal interview. Finally, all participants had returned from the mission trip over six months before the interview, requiring them to rely on memory.

Discussion of Findings

In this study, all participants had gone on a mission trip to Ghana using their own time and money. This suggests that all were willing and eager to go to another country and witness different cultural health beliefs and practices. In order to truly understand the cultural health beliefs and practices in Ghana, Africa, it is important that all participants had first had experience with Ghanaians. The participants were supportive of the research since they themselves wanted a better understanding of health in Ghana and were passionate about improving health in

developing countries. When interviewed separately, it was surprising how many common elements there were.

In regards to spiritualities role in mental, physical and community health one instance that really shocked the participants was when a Ghanaian was “caned” for having a mental illness. When talking about this experience, participants’ eyes widened in disbelief and often looked away from the camera. This was a very emotional topic because the participants had never witnessed a violent beating like this. In regards to spirituality, it was hard for the Americans to comprehend using a spiritual leader over medical doctor for health ailments like a fever or wound.

The lack of education available to even the wealthiest Ghanaians is not comparable to the education in America. Concepts as basic as CPR are not known to the hospital staff of “Ghanaian trained” doctors and nurses. When talking about the lack of education, the participants reflected back on the various educational opportunities that they had and how much they already knew about health before entering nursing school that the Ghanaians didn’t know. The participants were empathetic to the barriers the Ghanaians faced due to the shortage of knowledge and resources. The participants also expressed frustration when the Ghanaians did not understand the importance of preventative health care and being medication compliant.

When discussing the priority of health in the interviews, the participants had to come to terms with the fact that the Ghanaians had different priorities due to poverty. Decisions were made in the moment, not caring about the future consequences because if the pay from today’s work is not obtained the family members may go to bed hungry. For instance, taking a day off for blood pressure checks does not seem reasonable when pay is needed to put food on the table.

The participants expressed that it was a struggle to understand why even after educating the Ghanaians, they would just walk away without treatment. However, after getting a better sense of understanding of their cultural health beliefs, the participants understood that survival needs overpowered health practices.

When participants talked about the daily living conditions of the Ghanaians, their eyes widened and used arm gestures imitating tasks such as fetching water. For some of the participants, the living conditions and hospital conditions were the most shocking part of the trip. When one of the participants was hospitalized, the participant stated being terrified due to the lack of sterile supplies and cleanliness of the hospital. It was completely unheard-of to be in a hospital with wildlife walking around and no bathroom to the participants who were used to western hospitals. Participants reflected on how much transportation in America is taken for granted since the Ghanaians had to walk everywhere or plan trips in advance. Participants showed remorse when talking about the lack of supplies, since even if a Ghanaian was trying to be proactive and dress their wound, there would be nowhere for them to get the supplies they needed.

Wound care was appalling and shocking. When the participants talked about the severity of wounds, they used arms expressions and raised their eyebrows. Participants on the first trip felt unprepared to treat these wounds since they were much worse than anything they had seen or learned about. Participants were shocked that Ghanaians with large wounds continued a daily routine improvising and working around any disability. Participants that went on the second trip felt more prepared for wound care only because they were told beforehand about the wounds and specific wound care training was implemented.

Overall, a lot of useful information was gained from the interviews not only verbally but also through the participants' body language. The participants showed many emotions reiterating to the coinvestigators the passion they had for improving health in Ghana.

Conclusion

According to the experiences and perceptions of university students and faculty who had gone on a medical mission trip to Ghana, Africa there were many factors influencing health in Ghana. The role of spirituality in mental, physical, and community health; education; priority of health: Ghanaian view versus American view; living conditions; and wound care were seen as the biggest obstacles by the participants. The coinvestigators learned that these are the daily problems that most Ghanaians face, in addition, to the published problems such as HIV/AIDS, Tuberculosis and Malaria. In order to make any progress in improving health, needs such as clean water, must be met. Developed countries want to help by providing medications or money to Ghana, but this does not solve the underlying problems. If the medications were provided, the Ghanaians still might not be compatible, due to spiritual beliefs or lack of education. The best way that developed countries can help is by providing education and sustainable resources.

There will always be a need for continuing research, since the developing country of Ghana is continuously changing. With each trip, more is learned about the Ghanaians and how to best help them. Each trip can implement new strategies from the information provided from previous trips. The information gathered in the study can help others understand the health beliefs of another culture, better prepare themselves as a participant on a medical mission trip, and more effectively implement approaches of care.

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Appendix A
Research ROL Summary Table

| *Author(s), (Year). Title of article. | **Problem. Research Purpose &/or Research Question | Theoretical Framework What is it and how is it used? | Design of study ***Sample and sampling procedure | Variables and measures/tools. Reliability and validity of measures/tools | Findings Conclusions | Implications | ****Limitations of findings |
|--|--|---|---|---|---|---|--|
| Margaret E Kruk et al. Rural practice preferences among medical students in Ghana: a discrete choice experiment (2010) (P) (QUAN) | Why are there more doctors in urban Ghana? What will motivate doctors to live/work in rural Ghana? | In all African countries disproportionately more healthcare workers are in urban areas. It is used to see what the urban areas have that rural areas don't that doctors value | Non-experimental fourth-year medical students from a medical university in Ghana both genders and many ethnicities were represented. Focus Groups and surveys | Salary, management, equipment, housing, transportation | Medical students valued good management and equipment as much as a salary increase of 100% Housing was highly valued. | Management, supply of equipment and housing are things rural Ghana could work on to attract doctors to the area. | Participants not understanding the study. Placing more value on non-monetary items to be socially pleasing. Hard to fix the problems identified with existing rural health care. |
| Structural Barriers to Coping with Type 1 Diabetes Mellitus in Ghana: Experiences of Diabetic Youth and Their Families J Kratzer (2012) (P) (QUAL) | Explore the barriers associated with T1DM in families in Ghana and provide feedback for future policy changes. | Type 1 DM is a prevalent problem in Ghana. Education and treatment can be hard to find in Ghana | Participants were recruited from practices for diabetic children. Interviews and a diabetes quiz where methods used | Identify barriers to T1DM treatment and care in families | Primary care facilities, finances, schools and lack of formal support are the most common burdens families face | Proper diagnosis, education in schools and policy to reduce the cost and provide support are steps to take in the future. | Hard to overcome these barriers at the current time. It will take time for policy changes. |
| 3Locus of control and | Examine if an locus of | Adherence to medication | Non-experimental | Medical locus of | Most patients had low | There is a need for | All patients had |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| anti-hypertensive medication adherence in Ghana I Kretchy et al. (2014) (P) (qual) | control plays a role in adherence to medication regiment in Ghana | regiment for hypertension is as low as 50% Could locus of control play a role in this | Semi structured interviews Patients recruited form two hospitals in Ghana | control MHMC0.9 Medication adherence MMAS 0.79 Side effect experience HMSEE 0.8 | adherence. Side effects and low internal locus of control increased probability of low adherence | intervention to improve adherence levels. | comorbid disease and some had mixed LoC. |
| 4Residential characteristics as correlates of occupants' health in the greater Accra region, Ghana Emilia Udofla et al. (2014_ (p) (quan) | What is the housing like in Ghana Africa and how does it relate to health. | Poor housing contributes to the spread of disease including reparatory such as asthma and diarrhea from poor cleanliness | Cross-sectional Semi-structured questionnaire and inspection of the house Cluster random sampling | Housing characteristics, amenities, hygiene, health and physical complaints | 3 in 5 people are under the crowding limit. High prevalence of disease but those in good health report they feel healthy. | Privacy in crowded homes can improve health. | The study is conducted in only urban Ghana and did not interview those who were sick at the time. |
| 5Cross-country variation in additive effects of socio-economics, health behaviors, and comorbidities on subjective health of patients with diabetes. Shervin Assari (p) (2014) (Quan) | Study the relationship between diabetes diagnosis and subjective health across different countries. | Many studies link low SES to lower subjective health with diabetes but no cross-country study was done to verify this is true around the world. | Using multiple organizations information from over 9,000 adults from 15 countries was gained Questionnaire and doctor diagnosis was used. | SES, comorbid medical conditions, health behaviors and subjective health status | Female gender, low education, low income and comorbid heart disease are factors associated with poor subjective health status. Age exercise and other health behaviors varied across countries. | Comorbid heart disease is the most definite cause for poor subjective health. | Does not say where or how sampling was done. Does not analyze the tools used. |
| 6Community awareness of stroke in | Study the awareness of stroke and | Stroke is one of the leading | Cluster sample choosing | Knowledge of stroke and risk factor, | Poor knowledge of signs and | There is a need for stroke | Does not study rural Ghana where |

| | | | | | | | |
|---|---|--|--|--|---|--|---|
| Accra, Ghana. Eric S Donkor et al. (p) (Qual) (2014) | risk factor for it in Ghana | causes of morbidity and mortality and is increasing in third world countries | random suburbs then randomly choosing participants Semi-structured questionnaire | signs symptoms | symptoms and risk factors for stroke, but Ghanaians know it's a serious health emergency | education since it is the third leading killer in Ghana's capital | there is less access to information |
| 7Knowledge, perceptions and expectations of capitation payment system in a health insurance setting: a repeated survey of clients and health providers in Kumasi, Ghana Peter Agyei-Baffou et al. (2013) (p) (quan) | How do providers and clients understand the capitation payment system? | Many health care payment and insurance systems have been tried and failed in Ghana, how will this system compare. | Cross sectional with repeated surveys Participants from 13hospital and 20 clinics chosen | Knowledge of and attitudes toward the capitation payment system | Poor knowledge and attitude due to the misconception that it limited patient to one provider and doesn't cover drugs. | There is a need for factual knowledge in the general public or the system will fail. | Only studies one form of health insurance payment and only in one area of Ghana |
| Spiritual and religious beliefs: do they matter in the medication adherence behaviour of hypertensive patients. Irene Kretchy et al. (p) (quan)(2013) | Do spiritual and religious beliefs play a role in medication adherence in hypertensive patients in Ghana? | Ghana has a 93% non adherence rate of hypertensive. medications. Studies relate spirituality to treatment of disease but not specifically medication | Cross section patient recruited from 2 hospitals | Spiritual Perspective Scale Duke Religion Index Morisky Medication Adherence Scale | Majority did not adhere to medications High spirituality correlated with low adherence | There is a need to increase adherence to medication | Did not discuss what religion |
| A student's | What are the | Descriptive | Case Study | Only one | Lack of | More | Only one |

| | | | | | | | |
|--|--|----------------------|-------------------|------------|---|---|-------------|
| experience of nursing care in a Ghanaian hospital. J. Matthews & D. Biggs. (2011) (s) (qual) | working conditions in a Ghanaian Hospital? | Ethnographic Nursing | of one individual | individual | medical supplies, hospital conditions not sanitary, standards of nursing practice | education and supplies are needed in Ghanaian hospitals | participant |
|--|--|----------------------|-------------------|------------|---|---|-------------|

Appendix B
Consent Form

**The University of Akron
Institutional Review Board**

Understanding Cultural and Health Beliefs in Ghana, Africa

Introduction: You are invited to participate in a research project being conducted by Diane Lorenzen, a faculty member, Jamie Wossilek and Rachel Patterson, students in the Department of Nursing, at the University of Akron.

Purpose: The purpose of this study is to explore health and illness experiences and perceptions of university students and faculty going on a medical mission trip to Ghana, Africa. 7-9 participants will be participating in the study.

Procedures: Participants will be interviewed and audio-recorded. The interview should last 45-60 minutes. Participants will be asked to provide demographic information including age, gender, ethnicity, education level, and student/faculty status. Then participants will be asked questions about their observations of health beliefs and practices in Ghana.

Exclusion: Never been on a medical mission trip to Ghana, Africa or under age 18.

Risks and Discomforts: Interview will be video recorded but all the data will be kept on a locked computer that only the co-investigators and faculty sponsor have access to. Interviews will be conducted in a quite private office setting. Consent forms will be kept in a locked safe.

Benefits: You will receive no direct benefit from participation in this study, but your participation may help us better understand health beliefs and practices in Ghana, Africa

Right to Refuse or Withdraw: Participation in this study is voluntary. Participants have the right to refuse to participate or withdraw from the study at any time without penalty or loss of benefits to which they are otherwise entitled. Failure to participate will in no way affect their grade.

Confidential Data Collection: Any identifying information collected will be kept in a secure location and only the co-investigators and sponsor will have access to the data. Participants will not be individually identified in any publication or presentation of the research results. Only aggregate data will be used. Your signed consent form will be kept separate from your data, and nobody will be able to link your responses to you.

Confidentiality of Records: Records will be kept confidential by being kept on a password protected computer that only the co-investigators and sponsor will have access to. Consent forms will be kept in a locked safe. Data will be deleted after the study is completed.

Videotaping: Videotaping will be done on a computer in a private office setting in individual interviews. Then the video recording will be transcribed verbatim and written words will be analyzed. After the study is completed recordings will be deleted. Only co-investigators and sponsor will see the video recording.

Who to contact with questions: If you have any questions about this study, you may call Diane Lorenzen at University of Akron Department of nursing. This project has been reviewed and approved by The University of Akron Institutional Review Board. If you have any questions about your rights as a research participant, you may call the IRB at (330) 972-7666.

Acceptance & signature:

I have read the information provided above and all of my questions have been answered. I voluntarily agree to participate in this study. I will receive a copy of this consent form for my information.

Participant Signature

Date